

PTO/SB/21 (09-04) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE aperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/536,699 TRANSMITTAL Filing Date May 27, 2005 First Named Inventor **FORM** Reinhold Koch Art Unit 2819 **Examiner Name** Unknown (to be used for all correspondence after initial filing) Attorney Docket Number 3007990-0001-PCT-US Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC Fee Transmittal Form Drawing(s) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC Petition (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Preliminary Change of Correspondence Address Other Enclosure(s) (please Identify Terminal Disclaimer **Extension of Time Request** below): (1) Foreign Patent References Request for Refund **Express Abandonment Request** (2) Non-Patent References CD, Number of CD(s) Information Disclosure Statement (3) Postal Receipt Card Landscape Table on CD Certified Copy of Priority Remarks Document(s) Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name SCHNADER, HARRISON, SEGAL & LEWIS, LLP Signature ai Printed name JOAN T. KLUGER Date Reg. No. 38,940 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: Signature Date DEANNA M. MCGREGOR Typed or printed name This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

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## THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

: 2819

Examiner

: Unknown

22469

Serial No.

: 10/536,699

Filed

: May 27, 2005

Inventors

: Koch, et al.

Title

: MAGNETIC LOGIC DEVICE

Confirmation No.: 9291

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Docket No.: 3007990-0001-PCT-US

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

We submit herewith the Forms PTO/SB/08a and PTO/SB/08b. They are submitted to comply with the Applicants' duty of disclosure under 37 C.F.R. §1.56 and are believed related to this application.

We are submitting this in the spirit of voluntary disclosure.

It is accordingly requested that the Information Disclosure Statement be officially entered in the file of this case and that appropriate notification be made that it was considered in the prosecution of the case.

Respectfully submitted,

SCHNADER HARRISON SEGAL & LEWIS LLP

Dated: 5/1/04

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**Attorneys for Applicants** 

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Substitute for form 1449A/PTO Complete if Known Application Number 10/536,699 INEORMATION DISCLOSURE Filing Date May 27, 2005 STATEMENT BY APPLICANT First Named Inventor Reinhold Koch Art Unit 2819 (Use as many sheets as necessary) **Examiner Name** 2 **Attorney Docket Number** 3007990-0001-PCT-US of

U.S. PATENT DOCUMENTS						
Examiner Cit Initials' No		Document Numb Number-Kind Code <sup>2</sup> (if kn		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
HK		US- 5,629,549		05-13-1997	Johnson	
HK		US- 6,140,838		10-31-2000	Johnson	
HK		US- 2001-0026158	A1	10-04-2001	Ohno, et al.	
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FOREIGN PATENT DOCUMENTS						
Examiner Initials'	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (il known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵
/H.K./		DE 100 36 356 C2 (with English summary)	03-14-2002	Institut fur Physikalische Hochtechnologie e.V.		
/H.K./		DE 100 53 206 C1 (with English abstract)	01-17-2002	Siemens AG		
/H.K./		DE 101 44 395 C1 (with English summary)	10-10-2002	Siemens AG		

Examiner Signature	/Hal Kaplan/	Date Considered	05/06/2009
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

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				Complete if Known		
Substitute	for form 1449B/PTO			Application Number	10/536,699	
l in	FORMATION DIS	CLO	SURF	Filing Date	May 27, 2005	
				First Named Inventor	Reinhold Koch	
3	STATEMENT BY APPLICANT			Art Unit	2819	
	(Use as many sheets as n	ecessa	ry)	Examiner Name		
Sheet	2	of	2	Attorney Docket Number	3007990-0001-PCT-US	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/H.K./		"XMR-Technologien: Magnetoelektrik, Sensorik," "XMR Technologies" Technology Analysis: Magnetism, vol. 2, VDI Technology Center "Physical Technologies," Düsseldorf, Germany, 1997, pps. 11 – 46 (with English abstract)	
/H.K./		W.C. BLACK, et al., "Programmable logic using glant-magnetoresistance and spin-dependent tunneling devices (invited)," <i>Journal of Applied Physics</i> , vol. 87, 2000, pps. 6674-6679	
/H.K./		A. T. HANBICKI, et al., Nonvolatile reprogrammable logic elements using bybrid resonant tunneling diode-giant magnetoresistance circuits," <i>Applied Physics Letters</i> , 2001, vol. 79, no. 8, pps 1190 - 1192	
/H.K./		T. GERRITS, et al., "Ultrafast precessional magnetization reversal by picosecond magnetic field pulse shaping," <i>Nature</i> , vol. 418, 2002, pps – 509 - 512	
/H.K./		R. RICHTER, et al., "Field programmable spin-logic realized with tunneling-magnetoresistance devices," <i>Solid State Electronics</i> , Elsevier Science Publishers, Barking, GB, 2002, Vol. 46, No. 5, pps. 639 - 643	
/H.K./		A. NEY, et al., "Programmable Computing with a single magnetoresistive element," <i>Nature</i> , No. 425, 2003, pps 485 – 487	
/H.K./		R. RICHTER, et al., "Tunneling systems for field programmable spin-logic gates," Journal of Applied Physics, 2002, vol. 91, No. 10, pps 8402 - 8404	
/H.K./		R. RICHTER, et al., "Nonvolatile field programmable spin-logic for reconfigurable computing," Applied Physics Letters, 2002, vol. 80, No. 7, pps 1291 - 1293	
/H.K./		R. RICHTER, et al., "Field programmable spin-logic based on magnetic tunneling elements," <i>Journal of Magnetism and Magnetic Materials</i> , 2002, Elsevier, vol. 240, no. 1 – 3, pps. 127 - 129	

Examiner	/Hal Kanlan/	Date 05/06/2009
Signature	/nai Napiaii/	Considered 03/00/2009

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.